

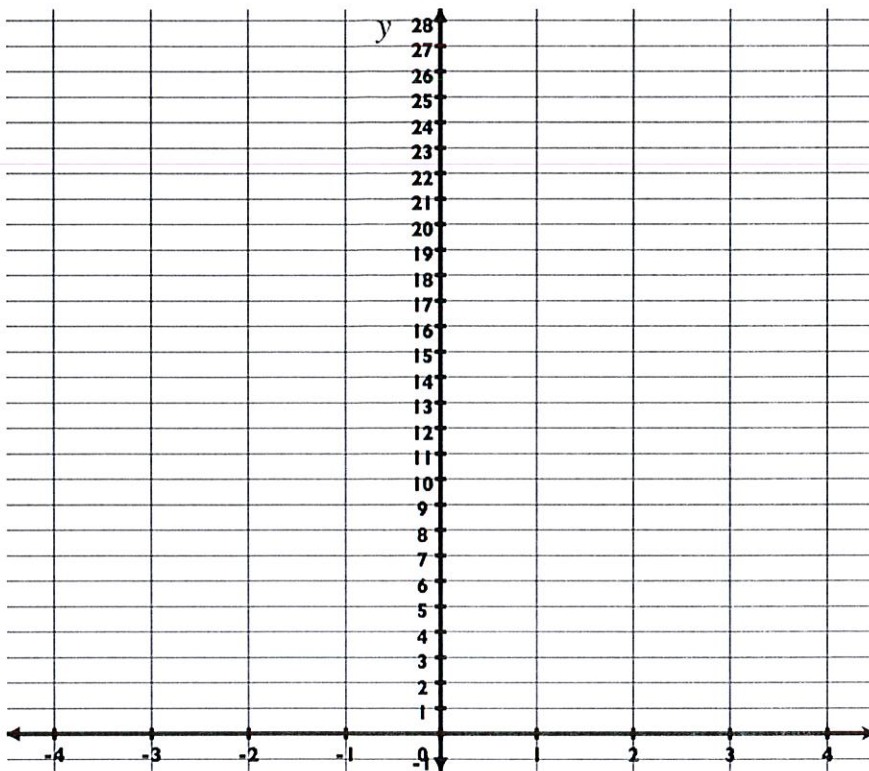
Name: _____
Date: _____

Graphing Exponentials Homework

Directions:

Make a data table, and then draw the graph of the function $f(x) = 3^x$. Use integer x-values from -3 to 3.

x	y



After completing the graph, answer these questions.

1. Complete the end-behavior statements about the graph of $f(x)$:

As $x \rightarrow -\infty$, _____ As $x \rightarrow +\infty$, _____

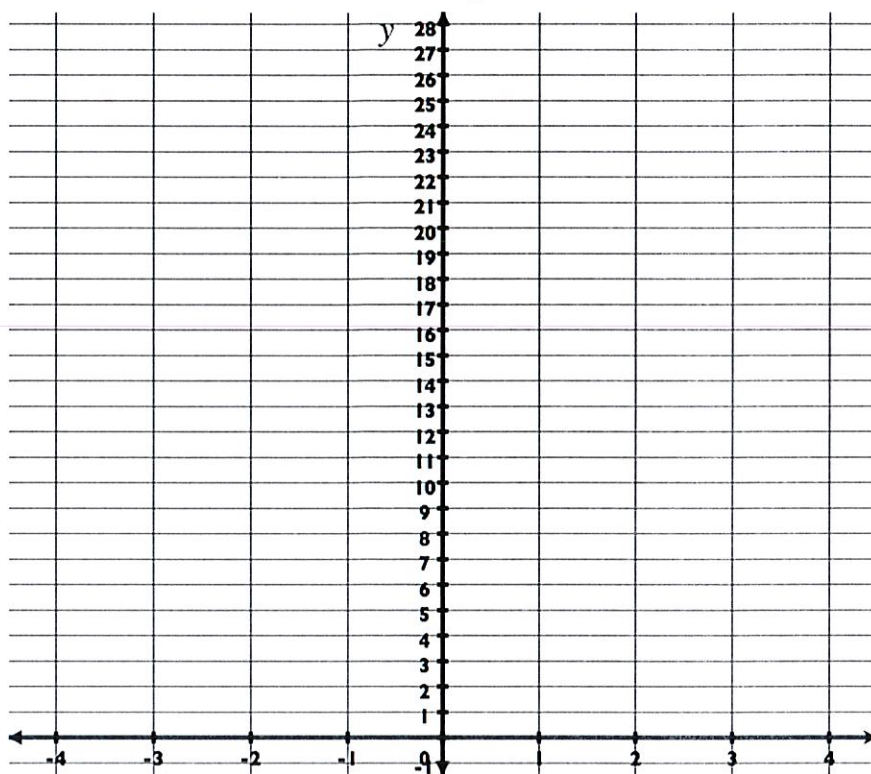
2. What are the coordinates of the y-intercept? Why is it there?

3. Explain why there aren't any x-intercepts.

Directions:

Make a data table, and then draw the graph of the function $f(x) = 2(3)^x$. Use integer x-values from -3 to 3.

x	y



After completing the graph, answer these questions.

1. Complete the end-behavior statements about the graph of $f(x)$:

As $x \rightarrow -\infty$, _____ As $x \rightarrow +\infty$, _____

2. What are the coordinates of the y-intercept? Why is it there?